Amendments to the Claims:

Claims 1-43 **(Cancelled)**

44. **(New)** A decoding method for decoding a block while switching between frame decoding and field decoding adaptively on a block-by-block basis, said method comprising:

obtaining, from a bit stream, a sequence of commands for assigning each of frame-indices for frame decoding to respective reference frames;

specifying a reference frame which is referred to when a block is decoded, using a reference index extracted from a coded block information area and a frame-index included in the assigned frame-indices, in the case where frame decoding is performed on the block; and

specifying a reference field which is referred to when the block is decoded, using a reference index extracted from the coded block information area and a field-index for field decoding which is generated using a frame-index included in the assigned frame-indices, in the case where field decoding is performed on the block.

45. **(New)** The decoding method according to Claim 44,

wherein said specifying of the reference field includes:

specifying, as the reference field, a field having a parity which is the same as a parity of a field including the block to be decoded, out of two fields that make up the reference frame specified by the frame-index, in the case where a value of the extracted reference index is double a value of the frame-index; and

specifying, as the reference field, a field having a parity which is different from the parity of a field including the block to be decoded, out of the two fields that make up the reference frame specified by the frame-index, in the case where the value of the extracted reference index is double the value of the frame-index, plus one.

46. **(New)** The decoding method according to Claim 45, further comprising:

obtaining, from the bit stream, information indicating a maximum number of frame-indices; and

determining a maximum number of field-indices to be double a value of the maximum number of frame-indices,

wherein said specifying of the reference field includes extracting the reference index within a range of the determined maximum number of field-indices.

47. **(New)** A data storage medium on which a program for decoding a coded block signal is recorded,

wherein the program causes a computer to execute the processing by the decoding method according to Claim 46.

48. **(New)** A data storage medium on which a program for decoding a coded block signal is recorded,

wherein the program causes a computer to execute the processing by the decoding method according to Claim 45.

49. **(New)** A data storage medium on which a program for decoding a coded block signal is recorded,

wherein the program causes a computer to execute the processing by the decoding method according to Claim 44.

50. **(New)** A decoding apparatus which decodes a block while switching between frame decoding and field decoding adaptively on a block-by-block basis, said apparatus comprising:

a command obtainment unit operable to obtain, from a bit stream, a sequence of commands for assigning each of frame-indices for frame decoding to respective reference frames; and

a reference frame/field specification unit operable to

(i) specify a reference frame which is referred to when a block is decoded, using a reference index extracted from a coded block information area and a frame-index included in the assigned frame-indices, in the case where frame decoding is performed on the block, and

(ii) specify a reference field which is referred to when the block is decoded, using a reference index extracted from the coded block information area and a field-index for field decoding which is generated using [the] a frame-index included in the assigned frame-indices, in the case where field decoding is performed on the block.

51. **(New)** A coding method for coding a block while switching between frame coding and field coding adaptively on a block-by-block basis, said method comprising:

generating a sequence of commands for assigning each of frame-indices for frame coding to respective reference frames;

specifying a reference frame which is referred to when a block is coded, using a frame-index for frame coding assigned by the sequence of commands, in the case where frame coding is performed on the block;

specifying a reference field which is referred to when the block is coded, using a field-index for field coding which is generated using the frame-index, in the case where field coding is performed on the block;

coding, as a reference index, the frame-index which is used for specifying the reference frame, in the case where frame coding is performed on the block; and

coding, as a reference index, the field-index which is used for specifying the reference field, in the case where field coding is performed on the block.

52. **(New)** The coding method according to Claim 51,

wherein said specifying of the reference field includes:

specifying, as the field-index, a doubled value of a value of the frame-index which is used for specifying a reference frame including the reference field, in the case where the reference field has a same parity as a parity of a field including the block to be coded; and

specifying, as the field-index, a value obtained by adding one to the doubled value of the value of the frame-index which is used for specifying the reference frame including the reference field, in the case where the reference field has a different parity from the parity of the field including the block to be coded.

53. **(New)** The coding method according to Claim 52, further comprising:

coding information indicating a maximum number of frame-indices for frame coding; and

determining a maximum number of field-indices for field coding to be double a value of the maximum number of frame-indices for frame coding,

wherein said specifying of the reference field for field coding includes determining the field-index so that the number of specified reference fields is not greater than the determined maximum number of field-indices.

54. **(New)** A data storage medium on which a program for coding an image signal is recorded,

wherein the program causes a computer to execute the coding by the coding method according to Claim 53.

55. **(New)** A data storage medium on which a program for coding an image signal is recorded,

wherein the program causes a computer to execute the coding by the coding method according to Claim 52.

56. **(New)** A data storage medium on which a program for coding an image signal is recorded,

wherein the program causes a computer to execute the coding by the coding method according to Claim 51.

57. **(New)** A coding apparatus which codes a block while switching between frame coding and field coding adaptively on a block-by-block basis, said apparatus comprising:

a command generation unit operable to generate a sequence of commands for assigning each of frame-indices for frame coding to respective reference frames;

a reference frame/field specification unit operable to

(i) specify a reference frame which is referred to when a block is coded, using a frame-index for frame coding assigned by the sequence of commands, in the case where frame coding is performed on the block, and

(ii) specify a reference field which is referred to when the block is coded, using a field-index for field coding which is generated using the frame-index, in the case where field coding is performed on the block; and

a reference index coding unit operable to

(iii) code, as a reference index, the frame-index which is used for specifying the reference frame, in the case where frame coding is performed on the block, and

(iv) code, as a reference index, the field-index which is used for specifying the reference field, in the case where field coding is performed on the block.